MECHELECIV

THE STUDENTS MAGAZINE • VOLUME 27 • APRIL 1969 • NUMBER 5

THE GEORGE WASHINGTON UNIVERSITY

SCHOOL OF ENGINEERING AND APPLIED SCIENCE

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unless they prefer to work in the dark.

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The Mechelecіv

VOLUME 27 APRIL – 1969 No. 5

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DEPARTMENTS

Published at the George Washington University by direction of the Engineers' Council. Published six times during the school year in October, November, December, March, April, and May. Second class postage paid at Washington, D. C. Address communications to Mechelecіv Magazine, Davis-Hodgkins House, George Washington University, Washington, D. C. 20006, or telephone 676-6726.

You ask yourself: "Was it all worth it?"

You think back over the years you've invested in that brand new degree. The hard-earned dollars you hoarded from summer jobs—the sacrifice your folks made to help see you through.

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FROM THE DEAN . . .

This issue of MECHELECIV is an attempt to illustrate the dynamic atmosphere (which must be experienced to be fully appreciated) at the School of Engineering and Applied Science of the George Washington University. The purpose of this school lies in its efforts to foster and encourage learning, and in motivating the students to the point where learning becomes a way of life.

The role of the engineer in today's society is important, difficult, and complex. The problems that the engineer is called upon to resolve – rebuilding our cities, speeding up transportation, providing medical technology, building better roads, houses, bridges, automobiles, materials, railroads, ships, aircraft – to list just a few, must be considered as challenges and opportunities.

If our society is to progress effectively, it must be assured of a continuing supply of rigorously trained and educated engineers. The School of Engineering and Applied Science is completely committed to the training and education of today's students, who as tomorrow's leaders will help build a better society.

The pictures on the following pages illustrate the point that a student at the School of Engineering and Applied Science has the opportunity to participate in a learning experience which includes the classroom, the laboratory, daily contact outside the classroom with his classmates and teachers, periodic technical seminars; in sum, exposure, contact, and involvement with engineers and engineering.

Also available to the student are the many unique recreational and cultural opportunities that abound in Washington, D. C.: the historic monuments and government buildings; art museums; theaters; music (every kind); extensive park areas for hiking, bicycling, boating, and other outdoor activities. In short, Washington is filled with places to go and things to do. The University, which is located within the city of Washington, is either within easy walking distance or a short bus ride from all these activities.

On the next page there are listed some of the compelling reasons the School of Engineering and Applied Science merits your serious consideration as the school in which to study engineering.

If you wish additional information, please do not hesitate to write me.

Sincerely,

Dean Harold Liebowitz

IF YOU ARE INTERESTED IN BECOMING AN ENGINEER: FACTS ABOUT THE SCHOOL OF ENGINEERING AND APPLIED SCIENCE

SHOULD I CONSIDER ENGINEERING?

Yes, if you do well in high school and enjoy the mathematics and science courses you have had.

WHAT DOES THE GEORGE WASHINGTON SCHOOL OF ENGINEERING AND APPLIED SCIENCE HAVE TO OFFER?

(1) *Outstanding faculty*. The School faculty has more than 90 members (full and part-time) who have been chosen for their teaching ability and experience in their disciplines. Several faculty members have achieved outstanding national and international reputations for the scope and quality of their scholarship. About 70% of the full-time faculty have their doctorates.

(2) *Accredited curricula.* The School offers fully accredited curricula in Civil, Electrical, and Mechanical Engineering. Study in these professional disciplines will help prepare you for careers in the following areas: planning of cities; research on new types of structures; new materials and new methods of construction; analysis and design of energy systems; physical behavior and use of fluids; construction of mechanical systems-mechanisms, machines, control systems, power devices; computers; communications; microwaves; electronics; and medical engineering, among others.

(3) *Excellent adviser system.* The School encourages a close faculty-student relationship. Every entering undergraduate student is assigned a permanent faculty adviser to assist him in orienting himself in the professional discipline. Faculty advisers counsel students on their programs of study, the achievement and maintenance of satisfactory scholastic performances, professional development, and extracurricular activity as part of the educational process. Students must obtain their advisers' approval of programs of study prior to registration. All students are encouraged to discuss college problems with their advisers or instructors at any time; and parents or guardians are invited to consult with the Dean, Department Chairmen, and advisers concerning any student problem.

(4) *Small classes.* The School recognizes the individual student as the single most important element in the educational process. Wherever possible, class size is limited so that a close student-teacher relationship may be established.

(5) *Modern equipment and facilities.* The engineering laboratories at the School are constantly updated to keep them in line with current engineering practice. Work in the classroom and laboratory are designed to supplement each other.

(6) *Research opportunities.* Many educators believe that the learning experience is made more meaningful when it is coupled with research activities. There are many opportunities for the student to involve himself in various kinds of research activities in progress at the School: projects include structural mechanics, fluid mechanics and thermal sciences, continuum mechanics and materials science, medical engineering, computer science, etc.

(7) *Relationships with other organizations.* The School has agreements and arrangements with other organizations such as the National Bureau of Standards, Naval Research Laboratory, NASA-Langley Research Center, and Naval Ship Research and Development Center/Annapolis. These include cooperative education programs, utilization of scientific and engineering personnel from these organizations for teaching and research at the School, use of the unique and extensive equipment and facilities at these organizations by students and faculty.

(8) *Interesting on- and off-campus activities.* The George Washington University is a private school in downtown Washington, D.C., three blocks from the White House. There are more than 130 campus organizations which provide unlimited opportunity for student involvement. Student representatives serve as members of major University committees which deal with administrative policy, academic policy, student life, publications, performing arts, and religious life.

FAILURE

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Don't get us wrong. We keep our demands reasonable enough so that our recruits can make their decisions at their own pace. But our thinking is, a man feels awfully good about even a small decision when it's *his*.

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GWU - SEAS

■ Close faculty-student relationship.

■ Computers available for student projects.

■ An inquisitive mind is the key to learning.

Engineering is a broad profession. Its responsibilities and activities extend into every aspect of industry and research, and into many fields of commerce and the arts. Engineers have faced and continue to face problems in the production and distribution of all types of manufactured products, including the design of mechanical, electrical, and chemical processes, of equipment, and of plants in which such products are made; in the design and construction of an infinite variety of structures such as bridges, tunnels, harbors, and dams; in aircraft design and construction, including complicated electronic equipment for control, guidance, and communication; in the operation of transportation systems; in the wide spectrum of activities existing in the automotive industry; in the missile and space programs; in the generation and transmission of power; in the modern phases of communication; in the control of traffic; in city planning; in public health and sanitation as it affects the environment; and in ventilation and refrigeration. This list of applications is far from exhaustive; it does indicate, however, that engineering is a broad profession in which there are many specialists.

The curricula of the School of Engineering and Applied Science are founded on one basic principle – to assist the student in preparing for a career in engineering and applied science. This philosophy requires that the student master the principles on which future practice will be based, and that he receive an education centered on that meaningful junction between theory and practice so that throughout his professional life he can follow the interests and opportunities that develop in many directions.

■ An engineering student spends much of his time studying.

■ The Prof always knows the answer.

■ Teachers plotting against students.

■ Students plotting against teachers.

ENGINEERS' WEEK

■ Myron Schloss, this year's chairman of the Open House, directs traffic.

THE 1969 ENGINEERS' WEEK was marked at the GWU Engineering School by an open house organized and directed by Mr. Myron Schloss, a senior EE. Students from several Washington area schools viewed the many exhibits and demonstrations which included, among others, a National Aeronautics and Space Administration film on the recent trip to the moon, a fluidics-controlled and operated mail-handling machine from the Post Office Department, and a unique student-developed and operated sex determination machine (the members of the Elec-

■ The exhibits were as varied as they were i

trical Engineering department apologize for any complexes given to the pretty young females harrassed by this machine.)

Undergraduate engineering students gave guided tours of Tompkins Hall to the six hundred students and parents who came with the intention of determining what engineering is all about. They watched student demonstrations in the materials testing laboratory, the general mechanical engineering laboratory, and the Electronics Laboratory.

■ Not everyone knew what was happening all the time.

■ The sex-determination machine scores another hit.

■ Professor Doug Jones demonstrates a materials testing machine for two prospective students.

INTRODUCING

This month's Mech Miss is Jo Anne Pereira, better known among the engineers as "Big Red". Our hearts go out to those who cannot appreciate her flaming red hair and bubbling personality. Jo Anne describes herself as a little "crazy around the edges." Jo Anne is a freshman studying Elementary Education in the Columbian College. Her vital statistics are: $e^{3.64}$, $e^{3.22}$, $e^{3.58}$ and for you computer buffs: 100110,011001,100100.

In her New England accent, she described Engineers: "The Engineers, whom I know, are a variety of gentlemen each possessing a special 'something' which makes me glad to know him."

Miss Pereira's clothes courtesy of:

FINAL EXAM

What company was responsible for the following engineering innovations?

The transistor_____
Radio astronomy_____
Negative feedback_____
High Fi and Stereo_____
Synthetic crystals_____
TV transmission_____
Magnetic tape_____
Sound motion pictures_____
Microwave relay_____
Electronic switching_____
The solar battery_____
Telstar_____

The reason we give this "test" is because the answer to all of the questions is: the Bell System. And because, if the thought of working for us ever crosses your mind, we wanted you to know what kind of company you'd be in.

Be sure to see your Bell System recruiting team when they visit your campus. Or ask your Placement Director for the name of the Bell System recruiter at the local Bell Telephone Company, an equal opportunity employer.

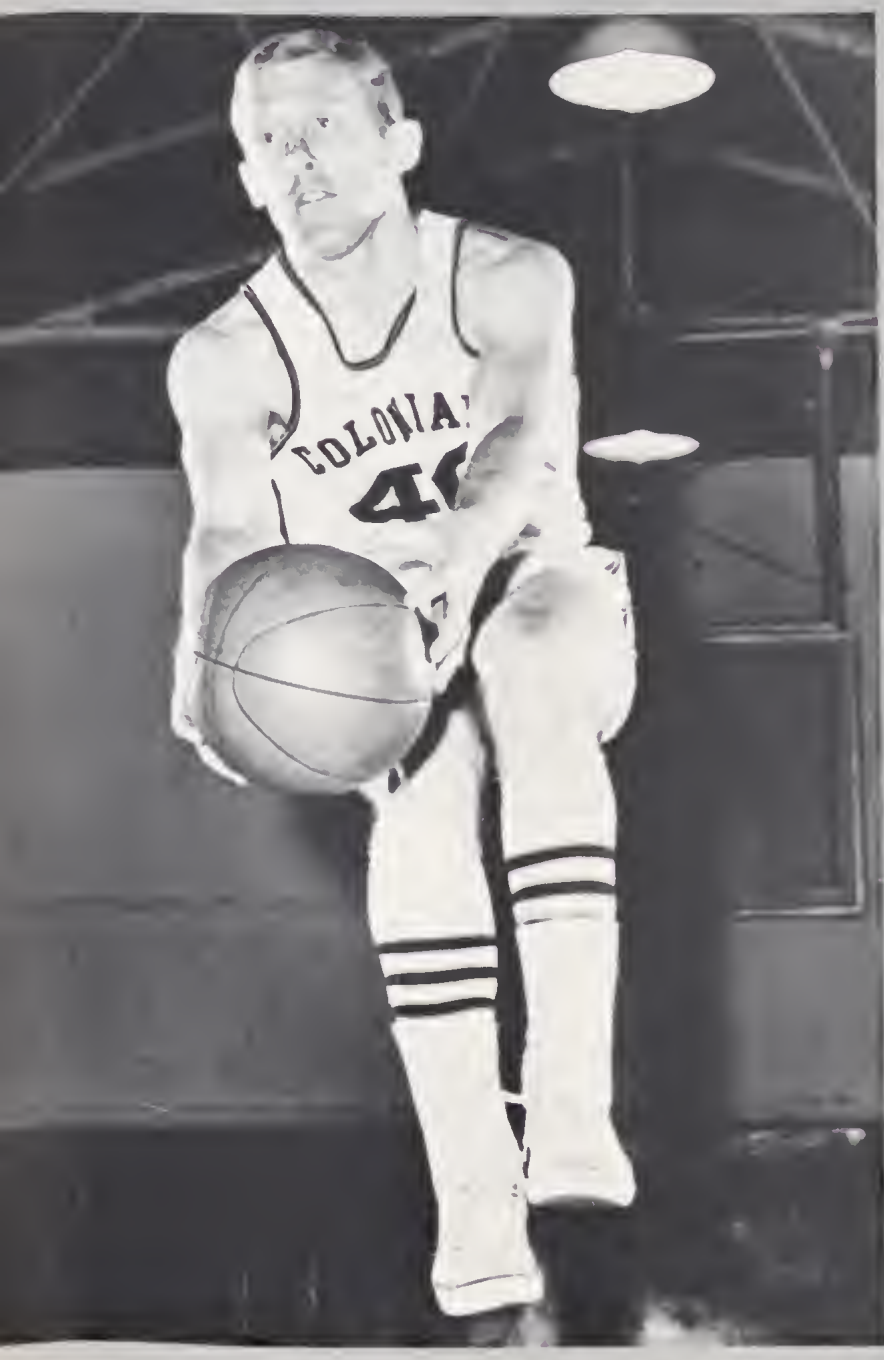
We hope the above final can be the start of something great.

YOUR ANYWHERE ANY THING ANY TIME NETWORK

MECHELECIV INTERVIEW:

BOB TALLENT

AN ENCOURAGING CONVERSATION WITH THIS G.W.U. BASKETBALL GREAT AND CIVIL ENGINEER



"Tallent. . . . Sink it!" That was probably the most frequently yelled cheer at any of this seasons basketball games. The cheer was for G.W.U.'s high-scoring guard Bob Tallent, who, more often than not, did just what the people wanted him to do . . . he sank the ball.

Bob Tallent is the greatest basketball player to come GW's way since Joe Holup in 1956. His name goes down in the record books with such other GW greats as "Red" Auerbach, Walter "Corky" Devlin, Joe Holup, and Jon Feldman.

Bob broke just about every GW basketball record during his one year of varsity action, except the most points scored per game, 49 points by Joe Holup in 1956. Bob had 46 points against Pittsburgh. Bob Tallent's GW records are:

**Most points in a season: 723
**Most field goals in a season: 284
**Most field goals attempted: 677
**Most field goals made in a game: 18 (ties a record set by Joe Holup in 1955-56)
**Most field goals attempted in a game: 38
**Best scoring average in a season: 28.9

The last record, that of best scoring average, has more significance when you consider that according to the final statistical report made by the National Collegiate Sports Services, Bob Tallent's average was the fifth best in the nation. Bob was fifth behind Pete Maravich, Rick Mount, Calvin Murphy, and Spencer Haywood. Those are some pretty outstanding players to be among.

Bob has received just about all the honors an athlete can receive. He was recently named to the Helms Foundation All-America Basketball Team. Bob becomes the first Colonial cager to win All-American honors since Joe Holup did in 1956. He was also given honorable mention in the A.P. and U.P.I. All-American polls. Bob was also invited to play in the East-West All-Star game in Memphis, Tennessee. The East team is being coached by Bob Cousey of Boston

College and the West team is being coached by John Wooden of U.C.L.A. This is the first year this particular All-Star game has been played. From looking at the names of the coaches and the players, it should gain in popularity.

While attaining these achievements, Bob was a Civil Engineering major in the School of Engineering and Applied Science. MECHELECIV thought it appropriate to inform the SEAS student body and alumni of the achievements Bob Tallent has made in his years at G.W., and also inform our readers of Bob's hopes for a career as a pro.

MECHELECIV congratulates Bob and wishes him the best of luck in his future career in professional basketball.

–DAVID R. ARMSTRONG

MECHELECIV: Many people feel that engineering is a much too demanding field to major in in college. In fact, many are afraid to even consider it. More so, once a person is in the engineering curriculum they persist in saying that they never have time for outside activities for fear that they will hurt their grades. However, you are a person interested in Civil Engineering, taking a full-time load and at the same time, a star on the basketball team. How did you manage to score a record number of points and have the fifth highest scoring record in the nation without hurting your QPI?

BOB: Well, due to a lot of road games, I missed a lot of time, so of course it has hurt my QPI to some extent because I'm not really making very good grades. I don't really believe that engineering is that much harder than anything else. It's hard at times though, I know for sure. However, if you really want to make the grades while participating in sports, or anything else for that matter, you can make them.

MECHELECIV: Why did you choose the Civil Engineering curriculum?

BOB: I have always been good in mathematics, and did real well in math on my college exams. Naturally you have to be good in math for engineering. Since I was interested in highway engineering, I went into Civil Engineering back at Kentucky. For a while, I thought that I might get out of it, but I didn't know of anything else I was more interested in.

MECHELECIV: What do you plan to do after you graduate? Go into the engineering profession or play pro-basketball?

BOB: Well, I want to play pro-ball. I've talked to scouts from four or five different clubs. During the off season, I'll probably get a job in engineering.

MECHELECIV: Since you're interested in playing pro-ball, would you mind playing in the ABA?

BOB: I kind of like the ABA because they have a rule whereby any shot past 22 feet is a three-pointer. Since I like to take those kind of shots, I believe I would enjoy playing for the ABA.

MECHELECIV: If you had a choice of playing on any ABA or NBA team are there any you would prefer?

BOB: Well, if I played in the NBA I'd rather play for Baltimore since it's close around here. I wouldn't want to play on a team on the West Coast, I believe. I'd sort of like to stay somewhere around home. As for the ABA, I'd like to play on any team on the East Coast. I wouldn't mind playing for Kentucky, or New Orleans, or Indiana . . . anywhere just so that it's not too far away. I don't think I'd like playing for a club like Seattle on the West Coast, but I don't know, if they draft me, I'll play for them, of course. But I'd rather play on a team closer to home.

MECHELECIV: Have you had any indications of how you'll fare in the pro draft?

BOB: No, I haven't any idea right now. There have been a lot of scouts here. The other night, there were two from the Milwaukee Bucks and the Chicago Bulls. There are usually

scouts here for every game from one club or another. I have talked to three ABA coaches, but before I go into the draft, I have no idea.

MECHELECIV: Now, getting back to the team, it looks like the team will finish with its first winning season in nine years. Do you consider this to be a turning point in basketball here at G.W.? And what does Coach Dobbs have brewing for the future?

BOB: Oh yes, I definitely think of it as a turning point for basketball here at GWU. From now on, GWU will have winning seasons. I think the main reason, of course, is Coach Wayne Dobbs. Without him we wouldn't have the players we have here right now and you can never have a good program without good players. He's had a couple of tough breaks in recruiting last year. Like the Kivertis boy; he couldn't get in because of grades. Had he been here as a freshman, the freshman team would have been a lot better. However, the freshman team has really improved during the second half of the season. They only had four players, actually, with a couple of boys just coming out to help them out. But we had two or three really good players on the team and they're going to help next years varsity. I'm sure they are going to have a real good freshman team next year too. Coach Dobbs has a lot of boys that are really interested in playing basketball here at GWU. The main thing about basketball now is recruiting. No matter how good a coach you are, if you don't have the players, it's not going to do you much good. I think that in two or three years, Coach Dobbs will possibly have the best team in the Southern Conference.

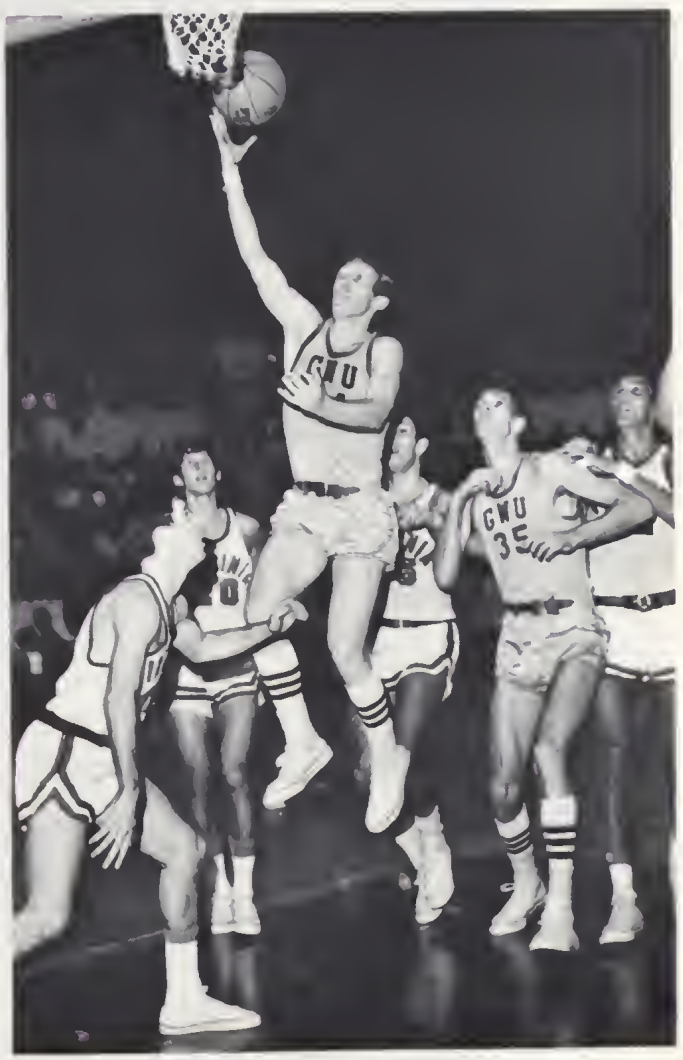
MECHELECIV: What can we expect from Ronnie Nunn without having three men guarding him at the same time? Is he, along with Baltimore and Johnson, going to balance out your absence next year?

BOB: I think so. I believe one of the big things for next year is if the Kivertis boy could come to GWU. He's 6' 11", over 225 pounds and really tough, besides being a good shooter. He's playing for Robert Morris Junior College right now and they're 19 an 0. If he comes here next year, that will bounce him into center and Baltimore and Johnson are real good forwards. Ronnie Nunn, who is potentially a great guard, along with brother Mike Tallent should make up next year's team. Of course, Ronnie Nunn's young and he has a lot to learn, but he'll learn it.

MECHELECIV: Is G.W. going to drop out of the Southern Conference and, if so, what are your reactions to it?

BOB: I don't know if G.W. is considering it, but I know that Stu Sirkin *(Hatchet* Sports Writer) is. I haven't heard anything about it; however, I really don't know. There are pros and cons about it. Since GWU is in Washington, D.C. and is a national school, maybe it would be better if we played more representative teams like Georgia Tech, V.P.I., and other major independent teams. But then again, it's always good to be in some kind of conference, you know. Since most of our students come from the North-Eastern region of the country, perhaps it would be better if we played against colleges up there instead of in the South. There is a lot to be said for such a move. I'm going to get into trouble right now, but it doesn't make any difference what I think, anyhow. I think if the Southern Conference is going to keep being the Southern Conference, they are going to have to make some rules. East Carolina didn't play Davidson this year one time, and we played them twice. That's not very fair, really, as far as standings go. If they're going to remain a conference, they're going to have to make some rules and a schedule whereby every team in the conference plays each other at least twice.

MECHELECIV: There is a great amount of basketball talent in the Washington area that seems to be passed up by



the area colleges, like Georgetown, George Washington, and American. Do you think that Coach Dobbs will reverse that trend and try to recruit these talented boys to play here at G.W.?

BOB: He's already got one; Maurice Johnson, who's really been a good player lately on the Freshman team. He's averaging up to 21 points and 17 rebounds a game for the freshmen. Maurice came here from McKinley last year. The main reason that the area colleges have trouble recruiting is because the boys can't get in; their grades and college exams aren't good enough. I think that this trend is definitely going to change this year. GWU will probably get four or five boys from the area this year, if everything goes right. I know they're recruiting at least six boys. I don't want to mention any names but I know at least two that are about ready to sign, maybe three or four, right in Washington.

MECHELECIV: Do you think that the lack of campus sports facilities here at G.W. have hindered recruiting; after all, you and your brother reportedly came here without considering the sports facilities.

BOB: Well, you know how it is when a boy gets out of high school, he wants to go to a place where there is a big coliseum. That's the big thing, but as for me, I'd already played varsity in a big coliseum with twelve thousand people attending each game. That didn't fire me up that much. What I was looking for was somebody like Coach Dobbs, who I could really get along with; somebody who really was interested in you and wanted you to get an education as well as play ball. Our lack of sports facilities on campus, however, has definitely hurt G.W.'s recruiting, and I think that it hurts the fans. As you probably know, it's hard to get to Fort Myer from campus, and with a coliseum right here on campus, the students could easily walk to the games. However, this year's student turnouts have been great. They have been exceptionally good and I enjoy playing for them at Fort Myer.

MECHELECIV: I understand that you have another brother in high school, is he considering coming to play for us?

BOB: Yes there is, but he won't be able to play with Mike if he comes because he's four years younger than Mike. He's doing real well. I called home this week and he said he scored 33 and 28 points in two games and grabbed 20 and 18 rebounds during those games. He's bigger than we are at 6' 2½" last year. Hopefully, he has grown to 6' 3" or 6' 4" by now. He's a real good player, averaging about 18 points now at Maytown High, our old high school. Maytown is 24 and 2 so they will probably go to the state tournament. Another boy from Maytown is Randy Click. He's a senior this year. I hope he comes here, because I'm sure he can get in. He's a real good guard and a real good shooter.

MECHELECIV: Do you have ambitions to ever coach a college team?

BOB: Yes, I do. Of course, last year, I coached the Freshman team to a 17 and 2 season. That was quite an experience for me and was one of the reasons I came to G.W. Coach Dobbs visited me in Kentucky and told me I could coach the Freshman team while I waited out one season. Boy, I really enjoyed it, of course we had some good players and had a good year so that made a difference. I like coaching and I think I can be a good coach. I want to try out pro-ball first, however.

MECHELECIV: In the up-coming East-West Game, what do you think about Bob Cousey being the coach of the East team and how do you feel about the possibility of playing against Lew Alcinder?

BOB: Well, Bob Cousey is a great coach and a great player; it will definitely be nice to play for him. As for Alcinder, I'm not looking too forward to that. I guess we will just have to stop and take long shots. There won't be many pick shots in that game. It will really be a pleasure to play with all those boys. There will be 20 boys on the teams and they are all really good players. I look forward to the game as far as making a lot of friends and learning a lot of things about basketball.

MECHELECIV: What about John Conrad, will he be playing more next year?

BOB: Probably, I don't know about ol' Conrad. He's a funny player; sometimes he really looks great and some other times he doesn't. He is a definite height advantage. But Conrad is a young ball player. He just started playing basketball in his last year in high school, so he's just learning the game, and that's tough. I started when I was 5 or 6 years old. Ever since I can remember, I wanted to be a basketball player. It's a hard sport to learn. Experience is really important in basketball. You can tell that by just watching the freshmen play. One night they'll get 30 and the next night they'll get 2. It's just that way. The older you get the more you learn. You don't get excited and you don't throw the ball away nearly as much and stuff like that. But I think Conrad will play more next year. I think Conrad will probably be a good player, he has all the tools. He's a good jumper for a big man and a good shooter. Conrad just needs some confidence.

MECHELECIV: Well, that's all Bob. Thanks for the interview and good luck in the future.

ENGINEERS' BALL

The 1969 Engineer's Ball was considered by all to be the most successful in twenty-two years. (We dare not print what happened at the 1947 ball.) It was held in the spacious ballroom of The Bedford Village Complex, in the rolling hills of Northern Virginia. Organized by Mr. and Mrs. James B. Bladen, the Ball provided an atmosphere of change from the typical campus affair. The music of the "Harmon Sounds" provided an enjoyable evening to all.

The highlight of the Ball was the crowning of the Queen, Miss Jo Anne Pereira. Miss Pereira (Big Red) is also this month's Mech Miss.

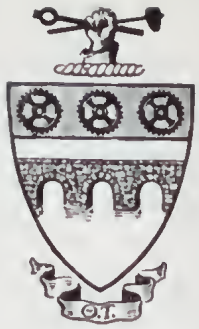
The participants of special note at this year's Ball were Dean Harold Liebowitz and Engineering alumnus Ray Moralis. Among the rest of the seventy-odd people at the Ball there was a noticeable absence of faculty and GTA's.

■ The Dean came.

■ Free Drinks; glass rental — 50c.

■ Remember the Ball of '47.

THETA TAU FRATERNITY AT GWU



By Robert S. Grant

In a recent address at the George Washington University, Senator Edmund Muskie criticized, "I sense a growing personal isolation (in youth) . . . a desire for isolation from the outside world." Perhaps this turning inward, as he called it, is caused by the rapid spread of impersonalization within our society and, more specifically, at this University. One manifestation of this is our nearly monad form of communication with the administration, the IBM card. And each September we trickle in from all over the country only to become engulfed in our own numbers. So often we hear the cry of the student who is lonely and desperate while standing with the mass of the "student body". No one cares. And it is inconceivable that individual worth will be recognized.

In truth, the individual's worth and thus his status, emanates from those who live and work with him. It is through their colleagues that men of high character distinguish themselves. This becomes even more apparent when men of honorable purpose join together under noble traditions and acceptable standards to better themselves and their world. The Engineering Fraternity is such a group. Joined by their common goal to better mankind, each individual is recognized, is developed professionally, morally, and socially, and can identify himself closely with people who care about him personally.

The Fraternity helps to develop the total man. Each individual encouraging his brothers to significant achievements both academic and non-academic. The development of the individual person is a measure of the effectiveness of a fraternity. The Engineering Fraternity inspires and challenges each member to his full professional maturation. Thus, the fraternity man feels a greater motivation to contribute his efforts and resources to worthwhile endeavors. The Fraternity is a dynamic group bent on avoiding a passive observance of life. In a continuous search for intellect, this organization takes both learning and living seriously, seeking the most and best of each. It seeks to expand communication on both technical and social levels, for the effectiveness of an engineer may well depend on it.

It is the responsibility of the engineers to communicate clearly. As leaders in society, they must act collectively and individually to protect their profession from misrepresentation and misunderstanding. The future of the engineering profession depends to a great extent on how well they exercise their role of leadership within the academic community. The Engineering Fraternity is instrumental in producing leadership of the highest quality.

The Fraternity gives its members something real to take away from college that is not available in institutional group living. Each brother gives of himself and in return receives lifetime friendships, fraternal fellowships, leadership training, character development, and professional development. Whether in academic difficulty or in working out some of his personal values in life, one always has help when needed and the tendency is to draw out one's best performance.

Theta Tau is the Engineering Fraternity at the George Washington University and the following is its *Statement of Policy*.

> "Theta Tau's purpose and object shall be to unite in fraternal fellowship such members of the engineering student body and profession as may be unanimously chosen by its founders, and thereafter by its student members; to promote the formation of lasting friendships among its brothers; to help its members professionally and personally; to search for the truth in science; to aid in the utilization of natural resources for the benefit of mankind; to inculcate the principles of professional integrity and personal honor among its members; to teach recognition of service to profession and country as a practical idealism; and to stimulate worthy engineering effort of any kind."

Theta Tau is a way of life. It participates in the University and in the community both scholastically and athletically, spiritually and bodily. Theta Tau discriminates against no one and welcomes everyone. Theta Tau welcomes you.

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Campus News

DEAN IN INDIA

DEAN Harold Liebowitz, of the School of Engineering and Applied Science, has been invited by the Aeronautical Society of India to be the keynote speaker at its 29th annual meeting to be held at the Indian Institute of Technology, in Madras, India on April 4, 1969. He has been asked to discuss some of his pioneering and important contributions in the field of engineering.

Dean Liebowitz has also been honored by being invited to deliver the Fifth Nilakantan Memorial Lecture on April 5, 1969 in India. He will discuss the significant work being done in fracture mechanics at this meeting.

The Nilakantan Memorial Lectures were initiated as a tribute to the outstanding and pioneering services rendered by the late Dr. P. Nilakantan (1910-1964) to aeronautics in India, and in particular, his contribution to the founding and growth of the Aeronautical Society of India.

Dean Liebowitz has been a very active research worker in the area of solid mechanics and in fracture mechanics. Before coming to this University, he was employed at the Office of Naval Research for about 20 years, where he was Head of the Structural Mechanics Branch. During the last 10 years, he has published about 60 papers, and is presently the editor of an advanced treatise of fracture which is being published by the Academic Press in seven volumes.

CZECH STUDENTS SEEK INFORMATION

THE following is a letter from a Czech student organization. They are looking for information pertaining to organizations such as their's. Please feel free to contact them individually or as a group.

"We are a new oranisation A.R.S. (Academic Students' Council) in a Faculty of Electrical Engineering in Pilsen, Nejedleho sady 14, Czechoslovakia and we have a favour to ask of you. Because we know nobody in USA to present to us the informations about some students' oranisation in the electrotechnical universities, we allowe us to write to You. We should be glad to establish relations with the students' oranisation like our.

"Please if You have possibility to help us to establish relations between us and some students' oranisations in USA, be so kind and inform us about the address.

"Thanking you in advance

Yours sincerely

(signed) Eduard Kilberger"

HONORARIES INITIATE FIFTEEN

TWO National Engineering Honorary Societies have completed the initiation of 15 School of Engineering and Applied Science undergraduate students.

The Tau Beta Pi Association announced the initiation of six undergrads whose scholarship places them in the top eighth of their class in their next to last year or in the top fifth of their class in their last year. These scholastically eligible students are further considered on the basis of personal integrity, breadth of interest both inside and outside

engineering, adaptability, and unselfish activity. Tau Beta Pi is the engineering students' equivalent of Phi Beta Kappa.

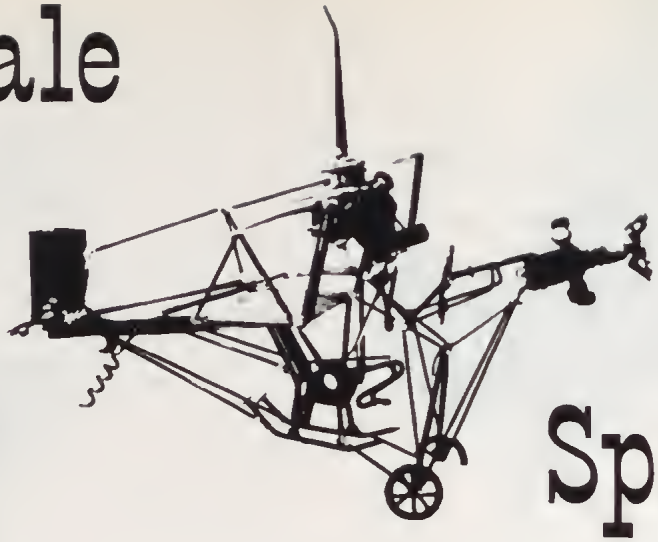
Those initiated for the fall semester 1968 were: Alan Dohne, Jorge Hidalgo, Roy Huffman, Rodolpho Laporta, Sandy Joel Marenberg, and Wesley Winchell.

The Sigma Tau fraternity, which recognizes both scholarship and professional attainment announced the initiation of the following for the fall 1968 semester: Michael Cook, Sandy Joel Marenberg, John Chamberlain, Myron Schloss, Yigal Pisetzy, Arthur Lukas, Rodolpho Laporta, Louis Kouts, and Richard Curtin.

DEANS LIST

Harold J. Althouse
Gerrold L. Bonn
Robert S. Bugash
Harrison P. Butturff
John V. Chamberlin
James M. Chandler
Michael S. Cook
Richard M. Curtin
Gregory A. Edmunds
Greg C. Eichert
Dennis A. Gallino
Imad S. Golmieh
Paul M. Haldeman, Jr.
Sidney J. Harmon, II
Jorge Hildago
Moon Y. Jeu
Rodolfo Laporta
Stephen A. Levine
Sandy J. Marenberg
Ellis R. McElroy
Bijan Modaressi
Steven T. Momii
Joseph E. Nance
John J. Natali
William T. Packard
Yigal Pisetzky
Dorothy Possehl
Michael W. Rohrer
Robert Sadler
William Schafer
Curtis A. Schroeder
Gregory D. Smith
Christopher G. Soares
Karen S. Spindel
Sam C. Taxis
Donald Vespia
Donald E. Wallroth

Tale Spin



Theta Tau: Would you sleep with me for a million dollars?

Coed: Yes, I think I would.

Theta Tau: Would you sleep with me for twenty-five dollars?

Coed: What do you think I am?

Theta Tau: We've already established that, now we're just haggling over the price.

* * *

ME: What is a conversation piece?

EE: A girl who likes to talk in bed.

* * *

Theta Tau: Give me a kiss.

Coed: You have to make me.

Theta Tau: Not so fast, all I want now is a kiss.

* * *

English Prof: Define pillage.

EE: About 16 for most girls.

* * *

Geography Prof: What's Jamaica?

CE: That's what you ask a Theta Tau brother when he comes back from a date.

* * *

EE: How did you get an A in biology?

Coed: I gave my body to science.

* * *

Coed: These pictures are dirty.

GTA: No they are not.

Coed: These pictures are filthy.

GTA: Don't be a square, haven't you ever seen five people in love.

* * *

English Prof: Define immaturity.

ME: A coed knowing where it is, but not what it's for.

* * *

Before retiring on his wedding night, the young minister turned to his bride and murmured, "Pardon me, darling, I'm going to pray for guidance."

"Sweetheart," his wife answered, "I'll take care of the guidance. You pray for endurance."

* * *

The following is an excerpt from a GTA's Lab notebook.

Procedure:

1) select a frog at random.
2) yell, "jump, frog, jump".
   Result: 50 foot jump.
3) cut off one leg.
4) yell, "jump, frog, jump".
   Result: 40 foot jump.
5) cut off another leg.
6) yell, "jump, frog, jump".
   Result: a frog with two legs can jump 30 feet.
7) cut off still another leg.
8) yell, "jump, frog, jump".
   Result: a frog with one leg can jump 20 feet.
9) cut off remaining leg.
10) yell, "jump, frog, jump".
    Result: frog did not jump.

Conclusion

A frog with no legs is deaf!

IBM invites you to join an infant industry.

Big as it is, the information processing industry is just beginning to grow.

Recently, *Fortune* estimated that the value of general purpose computers installed in this country will more than double by 1972.

Other publications have other predictions, but most agree that information processing is one of America's fastest growing major industries.

To somebody just starting out, this growth means exceptionally good chances for advancement. Last year, for example, we appointed over 4,000 managers—on performance, not seniority. Here are three ways you could grow with IBM:

Engineering and Science

"The interdisciplinary environment keeps you technologically hot."

"Working in data processing today pretty much means you work in a broad spectrum of technologies," says Nick Donofrio.

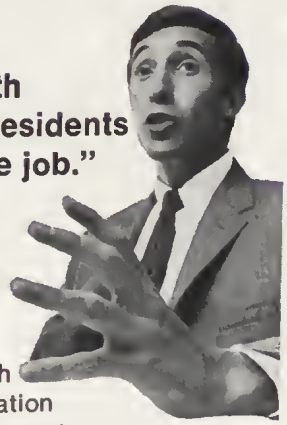
An Associate Engineer at IBM, Nick is a 1967 graduate in Electrical Engineering. He's using his technical background to design circuits for computer memory systems.

Nick says, "Your specialty at IBM can take you into the front yard of half a dozen different fields. In my job, for example, I work with systems design engineers, chemists, physicists, metallurgists, and programmers."

Career areas in engineering and science at IBM include: Research, Design & Development, Manufacturing, Product Test, Space and Defense Projects, and Field Engineering. You'll need at least a B.S. in any technical field.

Marketing

"Working with company presidents is part of the job."



"I'm pretty much the IBM Corporation in the eyes of my customers," says Andy Moran. "I consider that fairly good for an engineer who graduated only two years ago."

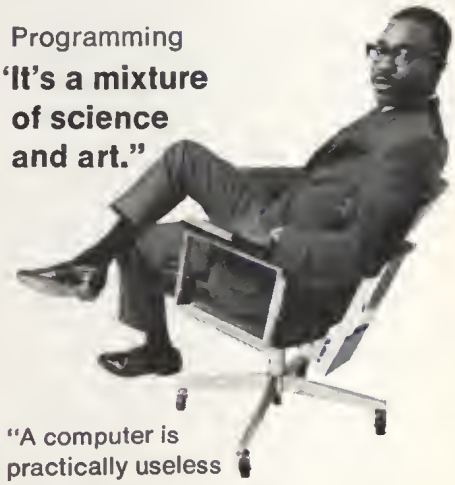
Andy earned his B.S.E.E. in 1966. Today, he's a Marketing Representative with IBM, involved in the planning, selling and installation of data processing systems.

Andy's customers include companies with annual sales ranging from 20 million to 120 million dollars. He often works with executive vice-presidents and presidents.

Career areas in marketing at IBM include: Data Processing Marketing and Systems Engineering, Office Products Sales, and Information Records Sales. Degree requirement: at least a B.S. or B.A. in any field.

Programming

"It's a mixture of science and art."



"A computer is practically useless until somebody writes a program for it," says Earl Wilson.

Earl got a B.A. in Modern Languages in June, 1967. He's now an IBM programmer working on a new teleprocessing system linking IBM divisions.

Earl defines a "program" as a set of instructions that enables a computer to do a specific job. "Programming involves science," says Earl, "because you have to analyze problems logically and objectively. But then you have an infinite variety of ways to write your program."

Career areas in programming at IBM include: Systems Programming, Applications Programming, Programming Research, and Internal Programming for IBM's own use. You'll need at least a B.S. or B.A.

Other reasons to consider IBM

1. Small Teams. No matter how large the project, we divide it into units small enough for one person or a few people. Result: quick recognition for achievement.

2. Educational Support. IBM employees spend over thirteen million hours a year in company-sponsored educational and training programs. And plans like our Tuition Refund Program could help you get your Master's or Ph.D.

3. 300 Locations. We have almost 50 plant, laboratory, or headquarters locations and over 250 branch offices in key cities throughout the United States.

Check with your placement office

If you're interested in career opportunities at IBM, ask your placement office for more information.

Or send a letter or resume to Paul Koslow, IBM Corporation, Dept. E, 425 Park Avenue, New York, N. Y. 10022. We'd like to hear from you even if you're headed for graduate school or military service.

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Bob Nerad seeks recognition

But not just for himself.

Bob was Chairman of a special Jaycee project to select the "Outstanding Young Educator" in Schenectady, New York.

He began by rediscovering firsthand some of the vibrant situations that confront young teachers. With that background he was ready to coordinate the nominating and judging.

Planning and coordinating come naturally to Bob. As a Production Control Specialist with General Electric's Medium AC Motor and Generator Department, he keeps production lines running smoothly. Coordinating machinery, raw materials and labor is crucial to any efficiently run business.

With a mechanical engineering degree from Cornell, in 1962, and an MBA in personnel administration from George Washington, in 1963, Bob sought to plunge directly into meaningful work. He'd had enough theory and simulations to last him for awhile.

At General Electric he found people that agreed with his thinking, and what's more, GE offered him immediate responsibility via the Manufacturing Management Program.

Like Bob Nerad, you can get a fast start at General Electric, in R&D, design, production or technical marketing. Talk to our man when he visits your campus. Or write for career information to: General Electric Company, Room 801B, 570 Lexington Avenue, New York, N. Y. 10022

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